COMMENTS

DRAFT REVISED RISK ANALYSIS AND RISK CHARACTERIZATION PLAN FOR THE LOWER PASSAIC RIVER STUDY AREA DATED OCTOBER 29, 2013

| No. | General Comment |
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| 1 | Throughout the document, the term "toxicity threshold" was replaced with "effects threshold." Please explain why this change was made. |

| No. | Page No. | Specific Comments |
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| 2 | Page 9, Section 1.3.3, third bullet | The following text was added to the third bullet, "and, if available, fish health observations." This text should be moved to a third bullet under reference datasets on the same page. |
| 3 | Page 17, Table 2-1 | a. The focal species listed for the benthic invertebrate community should include polychaetes (<i>Nereis virens</i>) and oligochaetes (<i>Lumbriculus variegatus</i>), for consistency with assessment endpoint 2. b. Heron may or may not be migratory. As such, please perform two calculations for the heron, one using an area use factor of 1 and another using an area use factor of 0.58. This change should also be reflected in Table 2-2. |
| 4 | Pages 19 to 24, Table 2-2 | The previous version of this report made several references to 2010 and planned 2011 data. The table now refers to 2011–2012 data. Should this be 2010–2012 data? Please verify. |
| 5 | Page 35, Section 2.3.1.2, first sentence | Please insert "acute and chronic" in front of "water toxicity-based values." This language should also be inserted on Page 36 and Page 40, as appropriate. |
| 6 | Page 36, Section 2.3.1.3 | Bivalve mollusks (<i>Geukensia demissa</i> and <i>Elliptio complanata</i>) should be included in the bulleted list of receptors, pursuant to Assessment Endpoint No. 4. |
| 7 | Page 36, Section 2.3.1.3 and Page 38, Section 2.3.1.4 | All metals, not just mercury and selenium, should be included in the evaluation. The rationale for including only 2 metals may be discussed in the uncertainty section of the BERA, but all metals should be included in the initial evaluation. |
| 8 | Page 38, footnotes 11 and 12 | a. These footnotes were added in the revised document to indicate that white sucker and carp were not identified as ecological receptors in the PFD and will be discussed in the uncertainty section of the BERA. EPA does not agree with this approach – they should both be discussed in the risk characterization section of the BERA as well as the uncertainty section. b. In Footnote 12, carp should be referred to as "non-native" rather than "invasive." |

| 9 | Page 48, third and fourth paragraphs, and footnotes 17 and 18 | Additional text was added in the revised document indicating that the CPG may use species sensitivity distributions to develop effect thresholds if sufficient data are available. EPA should be consulted prior to doing this. |
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| 10 | Page 56, first paragraph of Section 2.5.1.2 | The following text was added to the revised document "The proposed methods for the SQT evaluation may need to be revised based on the results of the SQT evaluation". This statement should be deleted. If there is an issue that is encountered during the evaluation, EPA should be consulted to resolve the issue. |
| 11 | Page 58, first bullet under Data Preparation | a. The CPG proposes designating as toxic only those sediments that have a response greater than the 90th percentile of the MSD for a given endpoint, as per Phillips et al. 2001. EPA would like to discuss this approach. While it appears to be valid from a theoretical/statistical standpoint, some questions remain about how it would be implemented, whether it fits in with other statistical comparison tests presented in the RARC, and whether it meets the project-specific data quality objectives, particularly with regard to the allowable false negative error rate. b. In addition, the bullet states "Normalization of toxicity responses to negative control responses". Normalizing toxicity test results to the lab control is not recommended as often times when results are control corrected, the data may actually "double-dip". In other words, by adjusting site samples to reflect control endpoints (e.g., mortality), you introduce the potential to "hide" any indication of toxicity or produce false positives in site samples that prior to control adjustment, indicated toxic effects. |
| | | The purpose of the lab control is to evaluate the health of each batch of organisms run concurrently with each test in order to prevent false negative results (i.e., test indicates toxicity when in fact mortality is due to poor organism health). In the absence of reference samples, it may be appropriate to statistically compare site samples to the lab control, but not to adjust the results. Recommend that the test result not be adjusted to the lab control. |
| 12 | Page 73, first paragraph, second sentence | While Route 21 may limit access to the river, it does not completely restrict access. Anglers have been observed accessing the river from Route 21. |
| 13 | Page 115, Section 3.3.5.2 | If the CPG determines they would like to use any modeled future EPCs, this should be discussed with EPA prior to inclusion in the draft document. |
| 14 | Page 116 to 117, Section 3.4 | Note that EPA should be consulted prior to using any PPRTV Appendix values. |
| 15 | Appendix A | A minor editorial change is suggested. "COPC" is placed before "COPEC" Selection in the title of the Appendix A and throughout the Introduction. However, the order is reversed when they are discussed in the following Section 2 (COPEC) and Section 3 (COPC). This should be made consistent to avoid confusion. |

| 16 | Appendix A, page two, first paragraph | The word "urban" is used in connection with the word "reference" several times. This is inconsistent with the agreement reached between EPA and the CPG during the dispute resolution process. Please remove the word urban. |
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| 17 | Appendix A, page 3 | The document refers to submittal of the TRV document, in prep. At this point, it is EPA's understanding that the TRV document will be submitted with the draft BERA report. If you intend to submit something sooner, please advise. |
| 18 | Appendix B, Page 3, third paragraph, last sentence | Fish health should be a reference, not a background. |
| 19 | Appendix B, Page 4, Section 2.2 | The text included in this section on Reference is not consistent with that submitted by EPA for inclusion in the report. While EPA's text was included as an attachment, it should be used in this section as well. |
| 20 | Appendix B, page 6, first sentence | Please clarify that the CPG is considering supplementing the current database with existing data from the New York/New Jersey harbor estuary, and that it is not recommending the collection of additional data. |
| 21 | Appendix B, page 6, sixth and eight bullets | Use of the word "urban" to characterize habitats in the Mullica River seems incorrect, and should be replaced with "rural" to be consistent with the bullets summarizing the data for freshwater samples. Please revise accordingly. |
| 22 | Appendix B, Table 1 | a. Measurement Endpoint 2d – please add control data to the last column. b. Measurement Endpoint 5c – this should be changed to reference, not background. |
| 23 | Appendix C, page 119, Table 16-1 | As per EPAs comments dated April 13, 2012, seasonal use for mink should be identified as "year-round". The revised Table 16-1 shows a LPR seasonal use of "unknown". Please revise to read "year-round". |